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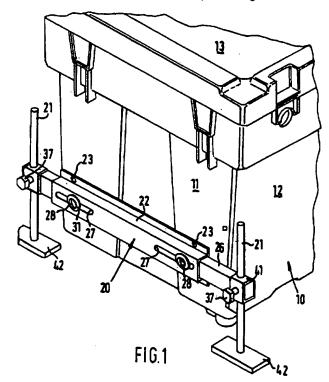
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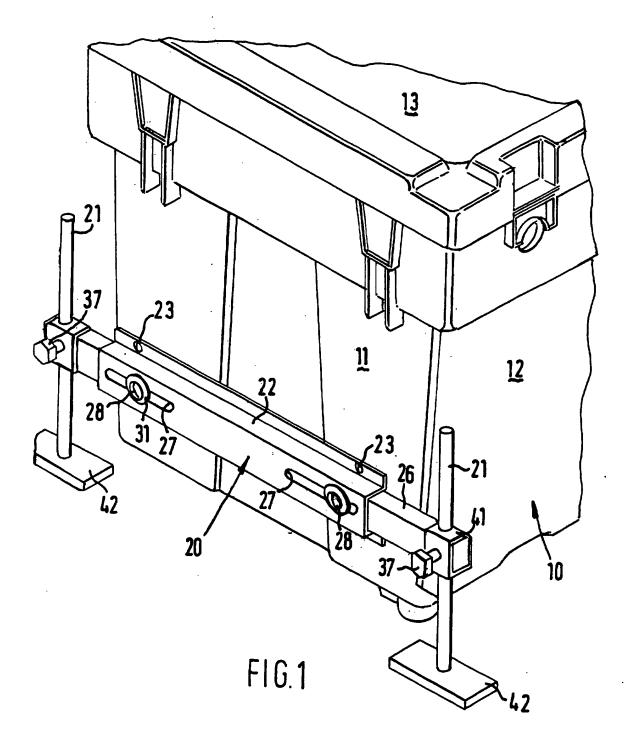
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 GB 2216497 A GB 2169877 A
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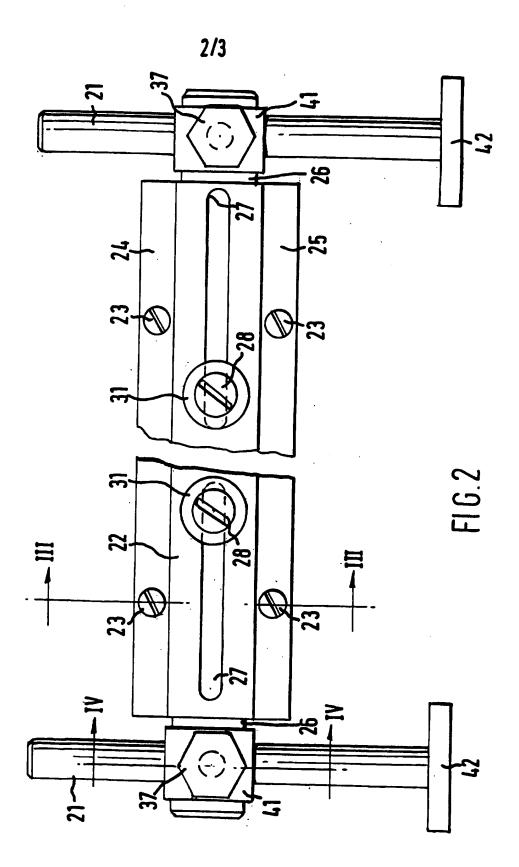
(54) Container stabiliser

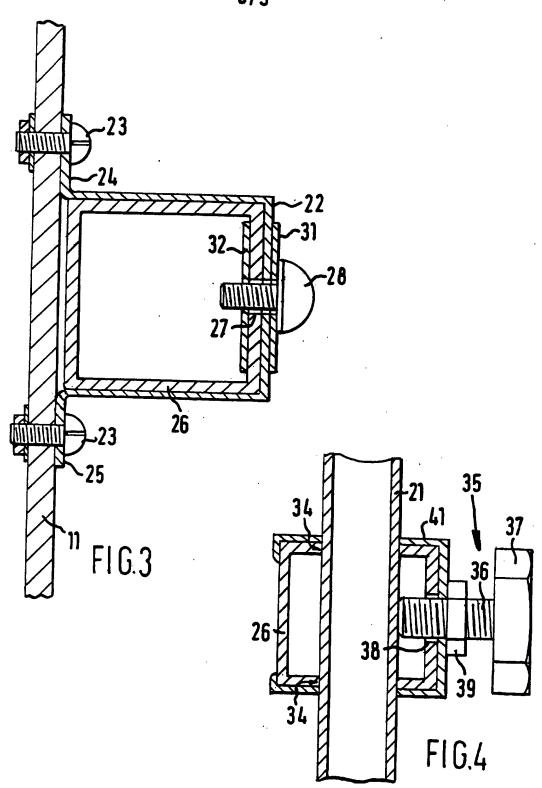
(57) A container stabiliser (20) for attachment to a <u>container</u> (10) especially a fishing box, comprises an elongate support member (22) for attachment to the container (10), at least one strut telescopically mounted to the support member for movement along one axis, and a leg (21) adjustably mounted in the free end of the strut (26) for movement along a second axis normal to the first axis. The support member (22) may have two oppositely extending struts mounted therein each with a respective leg (21).



GB 2309023







Container Stabiliser

This invention relates to a box-like container and a stabiliser for the box-like container, and in particular to boxes which may also act as seats, such as fishing equipment boxes or creels.

A fishing equipment box with detachable adjustable supports is shown in British Patent Application GB-A-2216497 B which discloses a box-like container having at each end a pair of spaced apart legs adjustably mounted at each end of an elongate member attached to each end of the box. This allows the legs to be individually adjusted so that the box can be horizontal even if the legs rest on uneven ground.

Some containers are relatively tall in comparison to the distance between the legs in each pair of legs and hence have a tendancy to tip over. Furthermore, on rough ground such as a river bank the legs may not be able to find a firm surface on which they can sit.

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The present invention provides a box-like container and stabilisers therefore that are more suitable for use on rough terrain.

25 Accordingly there is provided a container stabiliser comprising an elongate support member for attachment to a container, a strut telescopically mounted to the support member for movement along one axis, and leg adjustably mounted

in the free end of the strut for movement along a second axis normal to the first axis.

Preferably the strut is adjustably slidable within the elongate member and an adjustment means, in the form of a screw threaded clamp device, allows the strut to slidingly extend out of or collapse into the elongate member.

Preferably the leg is slidable within a passageway passing

through the strut and a second adjustment means is mounted on
the strut for clamping the leg within the passageway at any
selected extension of the leg.

Conveniently the elongate member has a top-hat cross-section with a pair of flanges that in use seat against a container wall so that the container forms a fourth wall for the elongate member, and fixings means pass through the flanges to secure the stabiliser to a container.

- The stabiliser may comprise an elongate support member having a pair of telescopic struts mounted in each end of the support member with a leg being adjustably mounted in strut, the struts and elongate member including the above features.
- 25 The invention will be described by way of example and with reference to the accompanying drawings in which:-
 - Fig. 1 is a perspective view of one end of a box-like

container having a stabiliser according to the present invention secured thereto,

- Fig. 2 is an elevation of the stabiliser shown in Fig. 1,
- Fig. 3 is a section on the line III-III of Fig. 2, and

Fig. 4 is a section on the line IV-IV of Fig. 2.

Now with reference to Fig. 1 there is shown a box-like container 10, which is preferably a fisherman's equipment box which is typically moulded from a plastics material such as polypropylene or high density polyethylene. The container 10 has a pair of end walls 11 (only one of which is shown) and a front wall 12 and a rear wall (not shown). The container 10 also has a lid 13 that can be used as a seat by the fisherman.

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The container 10 is supported on the ground by stabilisers 20 fixed to each end wall 11 of the container and which hold adjustable legs 21 at each corner of the container. The stabilisers 20 can be arranged so that the stabiliser at each end wall comprises a pair of legs 21 which are mounted to the container in a single elongate cross-member 22 which is secured to the end wall 11 by detachable fasteners, preferably screws 32 engaging nuts inside the container.

25 Alternatively each leg 21 can be mounted in an individual elongate cross-member, similar to one side of the cross-member as shown in Fig. 2, so that there are four cross-members located two on each end wall 11 of the container 30.

Now with reference to Fig. 2 each stabiliser comprises the elongate cross-member 22 which in use will be mounted substantially horizontally on the box and which has a hollow square-sectioned strut 26 telescopically mounted therein for movement along a horizontal axis so that the strut can be extended from or withdrawn into the cross-member 22 within predetermined limits. Typically the strut 26 is made from aluminium but other materials could be used.

The cross member 22 is a sheet steel pressing, but other suitable materials used as desired, having a top-hat cross section with a pair of oppositely extending flanges 24, 25. In use the flanges 24 and 25 sit against the end wall 11 of the container 10 so that the end wall 11 provides the fourth wall for the elongate member 22. The elongate member 22 is attached to the end wall by fastenings 23 spaced along the two flanges 24 and 25. The fastenings are preferably releasable fastenings in form of screws and nuts with the nuts being located within the container.

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The strut 26 is adjustably slidable within the elongate member 22 and can be adjusted to any selected position within an adjustment range by an adjustment means which comprises an elongated axial slot 27 in elongate member which accommodates a screw-threaded clamping device 28. The clamping device 28 comprises a headed bolt 29 with a washer 31 to the exterior of the elongate member, the screw threaded shank of the bolt 28 passing through the slot 27 and the wall of the strut 26 to

engage a nut 32 located within the strut. The nut 32 can be a captive nut or a plate-like nut which cannot turn.

The head of the bolt 28 is shaped for gripping between finger and thumb so that it can be turned manually. The strut 26 can then be extended as discussed with the clamping means loosened, and held in the desired position by tightening the clamping means 28. The limit of adjustment is set by the bolt 28 abutting the ends of the slot 27 and therefore the slot 27 may be given a length that meets the particular requirements of a stabiliser.

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The legs 21 are mounted for substantially vertical movement in the free ends of the struts 26. The legs 21 are generally hollow circular cross-section rods but could be made from solid material if desired. The rods are typically made from aluminium but they could be formed from stainless steel, brass or other suitable materials. The legs 21 pass through a vertical passageway 34 in the strut 26, in this case aligned holes in the upper and lower surfaces of the strut.

Again the legs 21 can each be set to hold the respective corner of the container 10 at a desired height by selective positioning within the strut 26. The legs 21 are each held at any adjusted height by a second clamping device 35 which includes a screw-threaded bolt 36, having a relatively large knob 37 on its head for manual adjustment, which passes through a hole 38 in the side of the strut 26 for engaging the

outer surface of the leg 21. The bolt 36 engages with a nut 39 held externally of the strut 26 by a mounting plate 41. The nut 39 may be secured to the plate 41 by any well known technique, such as welding, brazing, riveting, or clamping. The plate 41 extends around the strut 24 to the opposite side thereof so that the plate 41 is clinched to the strut 26. The upper and lower portions of the plate 41 have holes therein to accommodate the passage of the leg 21. At a selected height adjustment the leg 21 is clamped against sides of the passageway 34 by the shank of the screw bolt 36 pushing the leg 21 against the opposite surface to the bolt.

The lower ends of the legs 21 each carry feet 42 for contact with the ground. The feet 42 are preferably plate-like to spread any loads. The feet 42 may be fixed to the respective leg 21 by welding, etc., or may be adjustably mounted in a hollow leg 21 by a screw-threaded stud to give some additional fine height adjustment.

In use on rough terrain it is preferred for the struts 26 to hold the legs 21 beyond the front 12 and rear walls of the box-like container as is shown in Fig. 1, for maximum stability.

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Claims

- 1. A container stabiliser comprising an elongate support member for attachment to a container, a strut telescopically mounted to the support member for movement along one axis, and leg adjustably mounted in the free end of the strut for movement along a second axis normal to the first axis.
- 2. A stabiliser as claimed in Claim 1 wherein the strut is adjustably slidable within the elongate member and an adjustment means allows the strut to be selectively extended with respect to the elongate member.
- 3. A stabiliser as claimed in Claim 2 wherein the adjustment means comprises a clamping means fixed to the strut which is slidable in a slot in the elongate member, the clamping means clamping the strut to the elongate member at any selected location.

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- 4. A stabiliser as claimed in Claim 3, wherein the strut is hollow and the clamping means comprises a screw threaded bolt which is mounted in a nut held within the strut, the elongate member and strut being clamped between the head of the screw threaded bolt and the nut.
- 5. A stabiliser as claimed in any one of Claims 1 to 4 wherein the leg is slidable within a passageway passing

through the strut and a second adjustment means is mounted on the strut for clamping, the leg within the passageway at any selected extension of the leg.

- 5 6. A stabiliser as claimed in Claim 5 wherein the second adjustment means comprises a second screw threaded bolt mounted in a nut held externally of the strut on a mounting plate, the bolt passing through the strut to act directly on a surface of the leg to clamp the leg against the surfaces of the passageway in the strut.
 - 7. A stabiliser is claimed in any one of Claims 1 to 6 wherein each leg is provided with a foot at its lower end.
- 15 8. A stabiliser as claimed in any one of Claims 1 to 7 wherein the elongate member has a top-hat cross-section with a pair of flanges that in use seat against a container so that the container forms a fourth wall for the elongate member, and fixings means pass through the flanges to secure the stabiliser to a container.
 - 9. A stabiliser comprising an elongate support member having a pair of telescopic struts mounted one in each end of the support member, with a leg being adjustably mounted in the free end of each strut and incorporating the features as claimed in any one of Claims 1 to 8.

- 10. A container stabiliser substantially as described herein and with reference to Figures 1 and 2 of the drawings.
- opposite ends of the box-like container wherein the stabilisers are stabilisers as claimed in any one of claims 1 to 10.
- 10 12. A container as claimed in Claims 12 wherein the struts are extendable to position the legs beyond the front and rear walls of the box-like container.

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1 to 12

Examiner:

Mike Henderson

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Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): A1A A4L(LAM,LDC) B8P(PM, PW,PAX,PKX)

Int Cl (Ed.6): A01K-097/22 A47B-091/02,-091/16 B65D-025/24

Other: ONLINE:WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
Α	GB 2216497 A	(WILDE) (Whole specification relevant)	1 to 12
A	GB 2169877 A	(LEVINGSTON) (Whole specification relevant)	1 to 12

Document indicating lack of novelty or inventive step
 Document indicating lack of inventive step if combined with one or more other documents of same category.

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 P Document published on or after the declared priority date but before the filing date of this invention.

[&]amp; Member of the same patent family

Patent document published on or after, but with priority date earlier than, the filing date of this application.